

IN THE CLAIMS:

- 1-55. Canceled.
56. (Currently amended) An isolated antibody, or a fragment or derivative thereof, which specifically binds to an epitope present within amino acids 175-536 of a human EC RTP/DEP-1 density enhanced phosphatase-1 polypeptide comprising an amino acid sequence as set forth in SEQ ID NO: 4, in a diluent or excipient pharmaceutically acceptable in humans.
57. (Previously presented) The isolated antibody fragment of claim 56, wherein the antibody fragment is selected from the group consisting of an Fab fragment, an Fab' fragment, an F(ab')<sub>2</sub> fragment, an F(v) fragment, and an single chain fragment variable (scFv) fragment.
58. (Previously presented) The isolated antibody of claim 56, which is a monoclonal antibody, or a fragment or derivative thereof.
59. (Currently amended) The isolated antibody of claim 58, which is monoclonal antibody EC RTPAb-1, having a molecular weight of about 150 kDa and which specifically binds to an epitope present within amino acids 175-536 of a human EC RTP/DEP-1 density enhanced phosphatase-1 polypeptide comprising an amino acid sequence as set forth in SEQ ID NO: 4.
60. (Previously presented) The isolated antibody of claim 58, wherein the antibody is human or humanized.
61. (Currently amended) The isolated antibody of claim 60, which binds an eight amino acid epitope ~~having the~~ consisting of a sequence QSRDTEVL (SEQ ID NO: 1).
62. Canceled.
63. (Currently amended) An isolated antibody, or a fragment or derivative thereof, which specifically binds to an epitope present in an extracellular domain of an EC RTP/DEP-1 density enhanced phosphatase-1 polypeptide comprising an amino acid sequence as set forth in SEQ ID NO: 4 ~~extracellular domain~~, the epitope comprising the sequence QSRDTEVL (SEQ ID NO: 1).

64. (Previously presented) The isolated antibody fragment of claim 63, wherein the antibody fragment is selected from the group consisting of an Fab fragment, an Fab' fragment, an F(ab')<sub>2</sub> fragment, an F(v) fragment, and an single chain fragment variable (scFv) fragment.

65. (Previously presented) The isolated antibody of claim 63, which is a monoclonal antibody or a fragment or derivative thereof.

66. (Previously presented) The isolated antibody of claim 65, wherein the antibody is human or humanized.

67. (Previously presented) The isolated antibody of claim 63, in a pharmaceutically acceptable diluent or excipient.

68. (Currently amended) An isolated antibody, or a fragment or derivative thereof, which specifically binds an extracellular domain of an EC RTP/DEP-1 density enhanced phosphatase-1 polypeptide comprising an amino acid sequence as set forth in SEQ ID NO: 4 and wherein the antibody, fragment, or derivative thereof has activity in modulating angiogenesis, in a diluent or excipient pharmaceutically acceptable in humans.

69. (Previously presented) The isolated antibody of claim 68, or a fragment or derivative thereof, wherein the antibody, fragment, or derivative thereof has activity in modulating angiogenesis in an assay selected from the group consisting of a planar endothelial migration assay, an *in situ* transfection assay for migration, a cornea pocket angiogenesis assay, a chick chorioallantoic membrane assay, a proliferation assay, and an endothelial wound closure assay.

70. (Previously presented) The isolated antibody fragment of claim 68, wherein the antibody fragment is selected from the group consisting of an Fab fragment, an Fab' fragment, an F(ab')<sub>2</sub> fragment, an F(v) fragment, and an single chain fragment variable (scFv) fragment.

71. (Previously presented) The isolated antibody of claim 68, which is a monoclonal antibody, or a fragment or derivative thereof.

72. (Previously presented) The isolated antibody of claim 71, wherein the antibody is human or humanized.

73. (Previously presented) The isolated antibody of claim 68, in a diluent or excipient pharmaceutically acceptable in humans.

74. (Previously presented) The isolated antibody of claim 68, further having a binding specificity of a monoclonal antibody produced by a hybridoma cell line having American Type Culture Collection (ATCC) accession number HB12570.

75. (Previously presented) The isolated antibody of claim 68, wherein the monoclonal antibody is a monoclonal antibody produced by a hybridoma cell line having American Type Culture Collection (ATCC) accession number HB12570.

76. (Currently amended) An isolated antibody, or a fragment or derivative thereof, which specifically binds an epitope present within amino acids 175-536 of a human EC RTP/DEP-1 density enhanced phosphatase-1 polypeptide comprising an amino acid sequence as set forth in SEQ ID NO: 4, and wherein the antibody, fragment, or derivative thereof has activity in modulating angiogenesis, in a diluent or excipient pharmaceutically acceptable in humans.

77. (Previously presented) The isolated antibody of claim 76, or a fragment or derivative thereof, wherein the antibody, fragment, or derivative thereof has activity in modulating angiogenesis in an assay selected from the group consisting of a planar endothelial migration assay, an *in situ* transfection assay for migration, a cornea pocket angiogenesis assay, a chick chorioallantoic membrane assay, a proliferation assay, and an endothelial wound closure assay.

78. (Previously presented) The isolated antibody fragment of claim 76, wherein the antibody fragment is selected from the group consisting of an Fab fragment, an Fab' fragment, an F(ab')<sub>2</sub> fragment, an F(v) fragment, and a single chain fragment variable (scFv) fragment.

79. (Previously presented) The isolated antibody of claim 76, which is a monoclonal antibody, or a fragment or derivative thereof.

80. (Currently amended) The isolated antibody of claim 79, which is monoclonal antibody EC RTPAb-1, having a molecular weight of about 150 kDa and which specifically binds to an epitope present within amino acids 175-536 of a human

ECRTP/DEP-1 density enhanced phosphatase-1 polypeptide comprising an amino acid sequence as set forth in SEQ ID NO: 4.

81. (Previously presented) The isolated antibody of claim 79, wherein the antibody is human or humanized.

82. (Previously presented) The isolated antibody of claim 76, in a diluent or excipient pharmaceutically acceptable in humans.

83. (Currently amended) An isolated antibody, or a fragment or derivative thereof, which specifically binds to an epitope present in an extracellular domain of an ECRTP/DEP-1 density enhanced phosphatase-1 polypeptide comprising an amino acid sequence as set forth in SEQ ID NO: 4 ~~extracellular domain~~, the epitope comprising the sequence QSRDTEVL (SEQ ID NO: 1), wherein the antibody, fragment, or derivative thereof has activity in modulating angiogenesis.

84. (Previously presented) The isolated antibody of claim 83, or a fragment or derivative thereof, wherein the antibody, fragment, or derivative thereof has activity in modulating angiogenesis in an assay selected from the group consisting of a planar endothelial migration assay, an *in situ* transfection assay for migration, a cornea pocket angiogenesis assay, a chick chorioallantoic membrane assay, a proliferation assay, and an endothelial wound closure assay.

85. (Previously presented) The isolated antibody fragment of claim 83, wherein the antibody fragment is selected from the group consisting of an Fab fragment, an Fab' fragment, an F(ab')<sub>2</sub> fragment, an F(v) fragment, and a single chain fragment variable (scFv) fragment.

86. (Previously presented) The isolated antibody of claim 83, which is a monoclonal antibody or a fragment or derivative thereof.

87. (Previously presented) The isolated antibody of claim 86, wherein the antibody is human or humanized.

88. (Previously presented) The isolated antibody of claim 83, in a diluent or excipient pharmaceutically acceptable in humans.

89. (Previously presented) An isolated antibody having a binding specificity of an antibody produced by a hybridoma cell line having American Type Culture Collection (ATCC) accession number HB12570.

90. (Previously presented) The isolated antibody of claim 68, or a fragment or derivative thereof, wherein the activity in modulating angiogenesis is inhibition of angiogenesis.

91. (Previously presented) The isolated antibody of claim 76, or a fragment or derivative thereof, wherein the activity in modulating angiogenesis is inhibition of angiogenesis.

92. (Previously presented) The isolated antibody of claim 83, or a fragment or derivative thereof, wherein the activity in modulating angiogenesis is inhibition of angiogenesis.